

wherein:

PUG is a photographically useful group;

LINK 1 and LINK 2 are linking groups;

TIME is a timing group;

l is 0 or 1;

m is 0, 1, or 2;

n is 0 or 1;

Y is C, N, O or S;

X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T or R₁₂ to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups can combine to form a ring or three W groups can combine to form an aryl group or a bicyclic substituent;

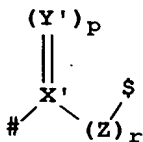
R₁₂ is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R₁₂ can combine with T to form a ring;

T is a substituted or unsubstituted alkyl cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or sulfonyl group t is 1 or 2, when t is 2 the two T groups can combine to form a ring;

a is 1 or when X is divalent a is 1 or 2; and

b is 1 when X is divalent and 0 when X is monovalent;

where LINK 1 and LINK 2 is independently of Structure II:



II

wherein

X represents carbon or sulfur;

Y represents oxygen, sulfur or N-R₁, where R₁ is substituted or unsubstituted alkyl or substituted or unsubstituted aryl;

p is 1 or 2;

Z represents carbon, oxygen or sulfur;

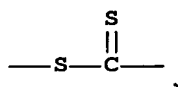
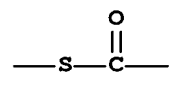
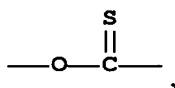
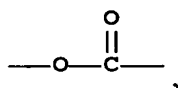
r is 0 or 1;

with the proviso that when X is carbon, both p and r are 1, when X is sulfur, Y is oxygen, p is 2 and r is 0;

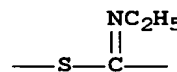
denotes the bond to PUG (for LINK 1) or TIME (for LINK 2):

\$ denotes the bond to TIME (for LINK 1) or T_(t) substituted carbon (for LINK 2).

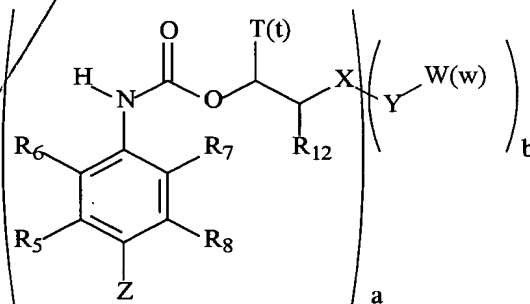
7. An imaging element according to claim 1, where LINK 1 and LINK 2 are the following:



Or



11. A photographic, photothermographic, or thermographic imaging element according to claim 1, wherein the compound of Structure I is of Structure III:



III

wherein:

Z is OH or NR_2R_3 , where R_2 and R_3 are independently hydrogen or a substituted or unsubstituted alkyl group or R_2 and R_3 are connected to form a ring;

R_5 , R_6 , R_7 , and R_8 are independently hydrogen, halogen, hydroxy, amino, alkoxy, carbonamido, sulfonamido, alkylsulfonamido or alkyl, or R_5 can connect with R_3 or R_6 and/or R_8 can connect to R_2 or R_7 to form a ring;

T is a substituted or unsubstituted alkyl cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or sulfonyl group, t is 1 or 2, when t is 2, the two T groups can combine to form a ring;

R_{12} is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R_{12} can combine with T or W to form a ring;

X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

Y is C, N, O or S;

a is 1 when X is monovalent and 1 or 2 when X is divalent;

b is 0 when X is monovalent and 1 when X is divalent;

W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups can combine to form a ring or three W groups can combine to form an aryl group or a bicyclic substituent.--

Please delete claims 6 and 21 to 41 without prejudice.